AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Canceled).

2. (Currently Amended) A method for correcting positional deviation of ink dots arising from bi-directional printing with a printing apparatus, the printing apparatus including a print head and a platen having a platen gap, which is a gap between the print head and the platen, the platen gap being adjustable to a plurality of values, the method comprising the steps of:

(a) providing different positional deviation correction values for the plurality of values of the platen gap, the positional deviation correction values being to be used for correcting positional deviation of ink dots in bi-directional printing; and

(b) selecting a positional deviation correction value according to the value of the platen gap, and correcting positional deviation of ink dots in bi-directional printing using the selected positional deviation correction value,

~~A method according to claim 1,~~ wherein the printing apparatus is capable of carrying out printing under each of a plurality of printing conditions each defined by a combination of a plurality of parameters including at least the value of the platen gap and a print resolution,

wherein the step (a) comprises providing respective positional deviation correction values for at least two printing conditions corresponding to at least part of the plurality of printing conditions, and wherein the step (b) comprises determining a positional deviation correction value according to the combination of the plurality of parameters in bi-directional printing.

3. (original) A method according to claim 2, further comprising the step off printing test patterns usable for determining positional deviation correction values for the at least two printing conditions, wherein the step (b) comprises the steps of:

i) using a first positional deviation correction value that is read out from a storage in the printing apparatus when performing the bi-directional printing under a printing condition where the platen gap is set to a relatively small first value, the first positional deviation correction value being determined by using the test pattern for determining the positional deviation correction value under the printing condition; and

ii) using a second positional deviation correction value when performing the bi-directional printing under another printing- condition where the platen gap is set to a relatively large second value, the second positional deviation correction value being determined by adjusting the first positional deviation correction value with an adjustment value representing a difference of the positional deviation correction values in two cases where the platen gap is set to the relatively small first value and to the relatively large second value, respectively.

4. (Currently Amended) A method for correcting positional deviation of ink dots arising from bi-directional printing with a printing apparatus, the printing apparatus including a print

head and a platen having a platen gap, which is a gap between the print head and the platen, the platen gap being adjustable to a plurality of values, the method comprising the steps of:

(a) providing different positional deviation correction values for the plurality of values of the platen gap, the positional deviation correction values being to be used for correcting positional deviation of ink dots in bi-directional printing; and

(b) selecting a positional deviation correction value according to the value of the platen gap, and correcting positional deviation of ink dots in bi-directional printing using the selected positional deviation correction value,

~~A method according to claim 1,~~

wherein the step (a) comprises the step of providing respective positional deviation correction values for a plurality of printing conditions which have a same value of the platen gap and different values of another parameter, and

wherein the step (b) comprises the step of, when a positional deviation correction value for a first printing condition among the plurality of the printing conditions is varied, varying the positional deviation correction value for another printing condition which has the same values of the platen gap and main scan speed with the first printing condition, with a variation amount of the positional deviation correction value for the first printing condition.

5. (Canceled). .

6. (Currently Amended) A printing apparatus capable of bi-directional printing and having a print head and a platen, the printing apparatus comprising:

a platen gap adjuster that is capable of adjusting a platen gap to a plurality of values, the platen gap being a gap between the print head and the platen;

a storage that stores different positional deviation correction values for the plurality of values of the platen gap, the positional deviation correction values being to be used for correcting positional deviation of ink dots in bi-directional printing; and

a positional deviation correction section that selects a positional deviation correction value according to the value of the platen gap, and corrects the positional deviation of ink dots in bi-directional printing using the selected positional deviation correction value,

~~A printing apparatus according to claim 5,~~ wherein the printing apparatus is capable of carrying out printing under each of a plurality of printing conditions each defined by a combination of a plurality of parameters including at least the value of the platen gap and a print resolution,

wherein the storage stores respective positional deviation correction values for at least two printing conditions corresponding to at least part of the plurality of printing conditions, and

wherein the positional deviation correction section determines a positional deviation correction value according to the combination of the plurality of parameters in bi-directional printing.

7. (original) A printing apparatus according to claim 6, further comprising:

a test pattern printing section that prints test patterns usable for determining positional deviation correction values for the at least two printing conditions,

wherein the positional deviation correction section comprises:

i) using a first positional deviation correction value that is read out from the storage when performing bi-directional printing under a printing condition where the platen gap is set to a relatively small first value, the first positional deviation correction value being determined by using the test pattern for determining the positional deviation correction value under the printing condition; and

ii) using a second positional deviation correction value when performing bi-directional printing under another printing condition where the platen gap is set to a relatively large second value, the second positional deviation correction value being determined by adjusting the first positional deviation correction value with an adjustment value representing a difference of the positional deviation correction values in two cases where the platen gap is set to the relatively small first value and to the relatively large second value, respectively.

8. (Currently Amended) A printing apparatus capable of bi-directional printing and having a print head and a platen, the printing apparatus comprising:

a platen gap adjuster that is capable of adjusting a platen gap to a plurality of values, the platen gap being a gap between the print head and the platen;

a storage that stores different positional deviation correction values for the plurality of values of the platen gap, the positional deviation correction values being to be used for correcting positional deviation of ink dots in bi-directional printing;

a positional deviation correction section that selects a positional deviation correction value according to the value of the platen gap, and corrects the positional deviation of ink dots in bi-directional printing using the selected positional deviation correction value; and

~~A printing apparatus according to claim 5,~~ wherein the storage stores respective positional deviation correction values for a plurality of printing conditions which have a same value of the platen gap and different values of another parameter, and

when a positional deviation correction value for a first printing condition among the plurality of the printing conditions is varied, the positional deviation correction section varies the positional deviation correction value for another printing condition which has the same values of the platen gap and main scan speed with the first printing condition, with a variation amount of the positional deviation correction value for the first printing condition.

9. (Canceled).

10. (Currently Amended) A computer program product for controlling bi-directional printing with a printing apparatus, the printing apparatus comprising a printing head, a platen, and a platen gap adjuster that is capable of adjusting a platen gap to a plurality of values, the platen gap being a gap between the print head and the platen the computer program product comprising

a computer-readable medium; and

a computer program stored on the computer-readable medium, the computer program comprising:

a first program that causes a computer to select a positional deviation correction value from a storage, the storage storing different positional deviation correction values for the plurality of values of the platen gap, the positional deviation correction values being to be used for correcting positional deviation of ink dots in bi-directional printing; and

a second program that causes the computer to correct positional deviation of ink dots in bi-directional printing using the selected positional deviation correction value; and

~~A computer program product according to claim 9,~~ wherein the printing apparatus is capable of carrying out printing under each of a plurality of printing conditions each defined by a combination of a plurality of parameters including at least the value of the platen gap and a print resolution,

wherein the first program has the function of providing respective positional deviation correction values for at least two printing conditions corresponding to at least part of the plurality of printing conditions, and

wherein the second program has the function of determining a positional deviation correction value according to the combination of the plurality of parameters in bi-directional printing.

11. (Currently Amended) A computer program product according to claim 10, further comprising:

a third program that causes the computer and the printing apparatus to print test patterns usable for determining positional deviation correction values for the at least two printing conditions,

wherein the second program has the functions of.

i) using a first positional deviation correction value that is read out from the storage when performing bi-directional printing under a printing condition where the platen gap is set to a relatively small first value, the first positional deviation correction value being determined by using the test pattern for determining the positional deviation correction value under the printing condition; and

ii) using a second positional deviation correction value when performing bi-directional printing under ~~anoter~~ another printing condition where the platen gap is set to a relatively large second value, the second positional deviation correction value being determined by adjusting the first positional deviation correction value with an adjustment value representing a difference of the positional deviation correction values in two cases where the platen gap is set to the relatively small first value and to the relatively large second value, respectively.

12. (Currently Amended) A computer program product for controlling bi-directional printing with a printing apparatus, the printing apparatus comprising a printing head, a platen, and a platen gap adjuster that is capable of adjusting a platen gap to a plurality of values, the platen gap being a gap between the print head and the platen the computer program product comprising

a computer-readable medium; and

a computer program stored on the computer-readable medium, the computer program comprising:

a first program that causes a computer to select a positional deviation correction value from a storage, the storage storing different positional deviation correction values for the plurality of values of the platen gap, the positional deviation correction values being to be used for correcting positional deviation of ink dots in bi-directional printing; and

a second program that causes the computer to correct positional deviation of ink dots in bi-directional printing using the selected positional deviation correction value; and

~~A computer program product according to claim 9,~~ wherein the storage stores respective positional deviation correction values for a plurality of printing conditions which have a same value of the platen gap and different values of another parameter, and

when a positional deviation correction value for a first printing condition among the plurality of the printing conditions is varied, the second program varies the positional deviation correction value for another printing condition which has the same values of the platen gap and main scan speed with the first printing condition, with a variation amount of the positional deviation correction value for the first printing condition.